

WHAT IS CLAIMED IS:

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1. An image processing apparatus, comprising:
 - a coding part partitioning a wavelet coefficient obtained by performing two-dimensional discrete wavelet transform on image data into bit-planes and generating coded data of the image data by performing entropy coding on the wavelet coefficient for each of the bit-planes;
 - a first memory accommodating a size of a coded data portion generated from the wavelet coefficient for each of the bit-planes through the execution of the entropy coding;
 - a second memory accommodating the coded data of the image data;
 - a setting part setting a target size of the coded data; and
 - a data size adjustment part adjusting the size of the coded data such that the size of the coded data falls within an acceptable range including the target size set by the setting part by sequentially discarding a portion of the coded data in a least significant order

from the second memory based on the size of the coded data portion corresponding to each of the bit-planes in the first memory.

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2. The image processing apparatus as claimed in claim 1, wherein the image processing apparatus is
10 based on JPEG2000.

15 3. The image processing apparatus as claimed in claim 2, wherein

the coding part partitions the wavelet coefficient into bit-planes for each code-block formed of a predetermined pixel matrix and generates the coded
20 data of the image data by performing entropy coding on the wavelet coefficient for each of the bit-planes in accordance with the JPEG2000;

the first memory accommodates a storage address of a coded data portion corresponding to each
25 code-block and a size of a coded data portion

corresponding to each coding pass for each of the bit-planes of each code-block with respect to the coded data stored in the second memory; and

the data size adjustment part adjusts the size
5 of the coded data such that the size of the coded data falls within an acceptable range including the target size of the coded data set by the setting part by subsequently discarding a portion of the coded data in a least significant order from the second memory based on
10 the size of the coded data portion corresponding to each coding pass stored in the first memory.

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4. An image processing method, comprising:
a coding step of partitioning a wavelet
coefficient obtained by performing two-dimensional
discrete wavelet transform on image data into bit-planes
20 and generating coded data of the image data by performing entropy coding on the wavelet coefficient for each of the bit-planes;

a first storage step of accommodating a size
of a coded data portion generated from the wavelet
25 coefficient for each of the bit-planes through the

execution of the entropy coding in a first memory;

a second storage step of accommodating the coded data of the image data in a second memory;

a setting step of setting a target size of the
5 coded data; and

a data size adjustment step of adjusting the size of the coded data such that the size of the coded data falls within an acceptable range including the target size set by the setting step by sequentially
10 discarding a portion of the coded data in a least significant order from the second memory based on the size of the coded data portion corresponding to each of the bit-planes in the first memory.

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5. The image processing method as claimed in claim 4, wherein the image processing method is based on
20 a JPEG2000.

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6. The image processing method as claimed in

claim 5, wherein

the coding step partitions the wavelet coefficient into bit-planes for each code-block formed of a predetermined pixel matrix and generates the coded
5 data of the image data by performing entropy coding on the wavelet coefficient for each of the bit-planes in accordance with the JPEG2000;

the first storage step accommodates a storage address of a coded data portion corresponding to each
10 code-block and a size of a coded data portion corresponding to each coding pass for each of the bit-planes of each code-block with respect to the coded data stored in the second memory; and

the data size adjustment step adjusts the size
15 of the coded data such that the size of the coded data falls within an acceptable range including the target size of the coded data set by the setting step by subsequently discarding a portion of the coded data in a least significant order from the second memory based on
20 the size of the coded data portion corresponding to each coding pass stored in the first memory.